# Statement of Basis of the Federal Operating Permit

INEOS USA LLC

Site Name: Chocolate Bayou Plant
Area Name: Olefins Business Unit
Physical Location: Po Box 1488
Nearest City: Alvin
County: Brazoria

Permit Number: O2327
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: July 24, 2017

# Operating Permit
# Basis of Determination

**Permit Area Process Description**
The Chocolate Bayou Olefins area consists of two olefins units, as well as various storage and loading facilities, wastewater facilities, and a cogeneration facility.

Olefins production process consists of a feed preparation area in which various liquid feedstocks arrive via pipeline and are stored in large floating roof tanks. Ethane-rich and propane-rich gas feeds must be dried and vaporized prior to cracking and liquid feeds must be preheated. The No. 1 Olefins Unit has six cracking furnaces and the No. 2 Olefins Unit has ten. Periodically each furnace is taken offline for decoking and the de-coke stream passes through a cyclone separator to remove particulate.

Hot effluent from the cracking furnaces is cooled in transfer line exchangers. The cracked hydrocarbon stream from liquid-cracking furnaces is then quenched with oil and fractionated to remove heavier constituents, and then combined with the effluent from gas-cracking furnaces. The combined stream is cooled with quench water and in the water wash tower. Lighter gases go overhead while water and heavier hydrocarbons are routed to an oil-water separator.

Lighter gases go through a compression stage and then sent to a caustic wash tower to remove H2S and CO2. The gases pass through dryers to remove any remaining water and then go through a de-propanizer to separate C3 and lighter components from C4 and heavier components. The lighter components are fed to a fourth stage of the cracked gas compressor and routed to the acetylene reactor, while the heavier portion continues to a debutanizer which produces mixed butenes in the overhead and raw pyrolysis gasoline in the bottom. The acetylene reactor effluent is alternately chilled and flashed to separate a methane/hydrogen tail gas stream and a hydrogen stream. The de-methanizer separates methane from C2s and C3s, which are then sent to the de-ethaneizer to split C2s and C3s. The plant uses ethylene and propylene as refrigerants throughout the process.

Several pressure vessels are used to store intermediates and products for the olefins units. Several internal and external floating roof tanks are also used to store feedstocks and products for the olefins units.

Rail loading facilities consist of ten identical loading stations, as well as necessary pressurized storage vessels, compressors, heat exchangers and piping. All vapors from loading operations are routed to a flare. Marine dock facilities are used to ship products by barge. Relief valves in the fill lines vent to a dock area flare and residual gases in the loading arms are purged to the flare.

Wastewater facilities include the process sewers, surge basins, and unit API separators and the plant API separator. This equipment collects rainwater and runoff and sends it to the plant waste treatment system. The Aromatics Waste Minimization unit reclaims benzene and other hydrocarbons. Both olefins units have identical stripping systems for treatment of benzene-containing wastewater streams. A separate sewer system collects in the butadiene surge basin which is pumped either to the butadiene recycle tank or the plant API separator. The plant API separator also receives benzene-free process sewer water from other areas of the plant. Surface hydrocarbons are skimmed off and the plant API effluent is discharged into the plant wastewater system for further treatment.

**FOPs at Site**

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1353, O3966

**Major Source Pollutants**

The table below specifies the pollutants for which the site is a major source:

| | |
|---|---|
| Major Pollutants | VOC, PM, NOx, HAPS, CO |

**Reading State of Texas' Federal Operating Permit**

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list
- Appendix B
    - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

**Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions**

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

**Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions**

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents is listed in the Determination of Applicable Requirements table.

**Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

| Regulatory Program | Applicability (Yes/No) |
|---|---|
| Prevention of Significant Deterioration (PSD) | Yes |
| Nonattainment New Source Review (NNSR) | No |
| Minor NSR | Yes |
| 40 CFR Part 60 - New Source Performance Standards | Yes |
| 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs) | Yes |
| 40 CFR Part 63 - NESHAPs for Source Categories | Yes |
| Title IV (Acid Rain) of the Clean Air Act (CAA) | No |
| Title V (Federal Operating Permits) of the CAA | Yes |
| Title VI (Stratospheric Ozone Protection) of the CAA | Yes |
| CSAPR (Cross-State Air Pollution Rule) | No |

**Basis for Applying Permit Shields**

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the “Permit Shield” attachment of the permit.

**Insignificant Activities**

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.

7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

**Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There

may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column “Changes and Exceptions to RRT.” If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| AM-1301 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Type of Service = Used in research and testing, performance verification testing, solely to power other engines or turbines during startup, in response to and during any officially declared disaster or state of emergency or directly and exclusively in agriculture<br>Fuel Fired = Petroleum-based diesel fuel |
| AM-1301 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005. |
| AM-1301 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than 500 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Service Type = Limited use.<br>Stationary RICE Type = Compression ignition engine |
| AN-101 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]<br>Fuel Fired = Petroleum-based diesel fuel |
| AN-101 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005. |
| AN-101 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).<br>Stationary RICE Type = Compression ignition engine |
| DM-177 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]<br>Fuel Fired = Petroleum-based diesel fuel |
| DM-177 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.<br>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.<br>Service = CI ICE is an emergency engine.<br>Commencing = CI ICE was newly constructed after 07/11/2005.<br>Manufacture Date = Date of manufacture was on or prior to 04/01/2006. |
| DM-177 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Brake HP = Stationary RICE with a brake HP greater than 500 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006.<br>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).<br>Stationary RICE Type = Compression ignition engine |
| GRP-ENGINES1 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C).<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option<br>CO Averaging Method = Complying with the applicable emission limit using a block one-hour average.<br>CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.<br>EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Type of Service = SRIC engine not meeting an exemption<br>Fuel Fired = Petroleum-based diesel fuel<br>NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average.<br>NOx Reduction = None<br>ESAD Date Placed in Service = Placed into service before October 1, 2001 and has not been modified, reconstructed or relocated on or after October 1, 2001.<br>NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000<br>Diesel HP Rating = Horsepower rating is 50 hp or greater, but less than 100 hp. |
| GRP-ENGINES1 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005. |
| GRP-ENGINES1 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP less than 100 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies.<br>Service Type = Normal use.<br>Stationary RICE Type = Compression ignition engine |
| GRP-ENGINES2 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]<br>Fuel Fired = Petroleum-based diesel fuel |
| GRP-ENGINES2 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-ENGINES2 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).<br>Stationary RICE Type = Compression ignition engine |
| GRP-ENGINES3 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]<br>Fuel Fired = Petroleum-based diesel fuel |
| GRP-ENGINES3 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005. |
| GRP-ENGINES3 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).<br>Stationary RICE Type = Compression ignition engine |
| GRP-ENGINES4 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C).<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option<br>CO Averaging Method = Complying with the applicable emission limit using a block one-hour average.<br>CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.<br>EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Type of Service = SRIC engine not meeting an exemption<br>Fuel Fired = Petroleum-based diesel fuel<br>NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average.<br>Engine Type = Lean-burn<br>NOx Reduction = None<br>ESAD Date Placed in Service = Installed, modified, reconstructed or relocated on or after October 1, 2006, but before October 1, 2007.<br>NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000<br>Diesel HP Rating = Horsepower rating is 300 hp or greater, but less than 600 hp. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-ENGINES4 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.<br>Diesel = Diesel fuel is used.<br>Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW.<br>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.<br>Filter = The CI ICE is equipped with a diesel particulate filter.<br>Displacement = Displacement is less than 10 liters per cylinder.<br>Service = CI ICE is a non-emergency engine.<br>Commencing = CI ICE was newly constructed after 07/11/2005.<br>Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.<br>Generator Set = The CI ICE is not a generator set engine.<br>Manufacture Date = Date of manufacture was after 04/01/2006.<br>Model Year = CI ICE was manufactured in model year 2007. |
| GRP-ENGINES4 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.<br>Service Type = Normal use.<br>Stationary RICE Type = Compression ignition engine |
| GRP-ENGINES5 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]<br>Fuel Fired = Petroleum-based diesel fuel |
| GRP-ENGINES5 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005. |
| GRP-ENGINES5 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than 500 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).<br>Stationary RICE Type = Compression ignition engine |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-ENGINES6 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C).<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option<br>CO Averaging Method = Complying with the applicable emission limit using a block one-hour average.<br>CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.<br>EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Type of Service = SRIC engine not meeting an exemption<br>Fuel Fired = Petroleum-based diesel fuel<br>NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average.<br>NOx Reduction = None<br>ESAD Date Placed in Service = Placed into service before October 1, 2001 and has not been modified, reconstructed or relocated on or after October 1, 2001.<br>NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000<br>Diesel HP Rating = Horsepower rating is 175 hp or greater, but less than 300 hp. |
| GRP-ENGINES6 | 40 CFR Part 60, Subpart IIII | 60IIII-1 | Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005. |
| GRP-ENGINES6 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ-1 | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP.<br>Performance Test = A performance test has been previously conducted that meets the conditions in 40 CFR § 63.6610(d)(1)-(5).<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Control Technique = Control technique other than an oxidation catalyst<br>Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies.<br>Emission Limitation = Limiting the concentration of carbon monoxide in the stationary RICE exhaust.<br>Operating Limits = Using the control techniques approved in Subpart ZZZZ<br>Monitoring System = Monitoring system other than a CPMS or CEMS<br>Service Type = Normal use.<br>Stationary RICE Type = Compression ignition engine |
| FUELTNK-SH | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Product Stored = Gasoline from a storage container in motor vehicle fuel dispensing service (as defined in 30 TAC Chapter 115)<br>Storage Capacity = Capacity is less than or equal to 1,000 gallons |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| FUELTNK-SH | 40 CFR Part 60, Subpart Kb | 60Kb-1 | Product Stored = Volatile organic liquid<br>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters) |
| GRP-TANK1 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Welded tank using an external floating roof<br>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia<br>Primary Seal = Mechanical shoe<br>Product Stored = VOC other than crude oil or condensate<br>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized<br>Storage Capacity = Capacity is greater than 40,000 gallons |
| GRP-TANK1 | 40 CFR Part 60, Subpart K | 60K-1 | Construction/Modification Date = On or before June 11, 1973 |
| GRP-TANK1 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK1 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK1 | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. |
| GRP-TANK10 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Product Stored = Other than crude oil, condensate, or VOC |
| GRP-TANK10 | 40 CFR Part 60, Subpart Kb | 60Kb-1 | Product Stored = Stored product other than volatile organic liquid or petroleum liquid |
| GRP-TANK10 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK10 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK11 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Product Stored = VOC other than crude oil or condensate<br>Storage Capacity = Capacity is less than or equal to 1,000 gallons |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-TANK11 | 40 CFR Part 60, Subpart Kb | 60Kb-1 | Product Stored = Volatile organic liquid<br>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters) |
| GRP-TANK11 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK11 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK2 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Welded tank using an external floating roof<br>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia<br>Primary Seal = Mechanical shoe<br>Product Stored = VOC other than crude oil or condensate<br>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized<br>Storage Capacity = Capacity is greater than 40,000 gallons |
| GRP-TANK2 | 40 CFR Part 60, Subpart K | 60K-1 | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978<br>Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters)<br>Product Stored = Petroleum liquid (other than petroleum or condensate)<br>True Vapor Pressure = True vapor pressure is at least 1.5 psia and less than 11.1 psia<br>Storage Vessel Description = Floating roof (internal or external)<br>Reid Vapor Pressure = Reid vapor pressure not determined |
| GRP-TANK2 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK2 | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. |
| GRP-TANK3 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Tank does not require emission controls<br>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia<br>Product Stored = VOC other than crude oil or condensate<br>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons |
| GRP-TANK3 | 40 CFR Part 60, Subpart K | 60K-1 | Construction/Modification Date = On or before June 11, 1973 |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-TANK3 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK3 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK3 | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. |
| GRP-TANK4 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Tank using an internal floating roof (IFR)<br>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia<br>Product Stored = VOC other than crude oil or condensate<br>Storage Capacity = Capacity is greater than 40,000 gallons |
| GRP-TANK4 | 40 CFR Part 60, Subpart K | 60K-1 | Construction/Modification Date = On or before June 11, 1973 |
| GRP-TANK4 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK4 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK4 | 40 CFR Part 63, Subpart G | 63G-1 | MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).<br>Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)<br>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.<br>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)<br>Emission Control Type = Internal floating roof |
| GRP-TANK5 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Welded tank using an external floating roof<br>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia<br>Primary Seal = Mechanical shoe<br>Product Stored = VOC other than crude oil or condensate<br>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized<br>Storage Capacity = Capacity is greater than 40,000 gallons |
| GRP-TANK5 | 40 CFR Part 60, Subpart Kb | 60Kb-1 | Product Stored = Waste mixture of indeterminate or variable composition<br>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia<br>Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal |
| GRP-TANK5 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.<br>Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351.<br>Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2)<br>Seal Type = Mechanical shoe primary seal |
| GRP-TANK5 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK5 | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. |
| GRP-TANK6 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Welded tank using an external floating roof<br>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia<br>Primary Seal = Mechanical shoe<br>Product Stored = VOC other than crude oil or condensate<br>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized<br>Storage Capacity = Capacity is greater than 40,000 gallons |
| GRP-TANK6 | 40 CFR Part 60, Subpart K | 60K-1 | Construction/Modification Date = On or before June 11, 1973 |
| GRP-TANK6 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK6 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK6 | 40 CFR Part 63, Subpart FFFF | 63FFFF-1 | Emission Standard = HAP vapor pressure is < 76.6 and the unit is complying with 40 CFR Part 63, subpart WW per § 63.2470(a)-Table 4.1.b.i.<br>WW Tank Control = An external floating roof is operated and maintained per 40 CFR § 63.1062(a)(2).<br>Notification = The referencing subpart requires notification of initial startup.<br>Unslotted Guide Pole = The tank uses an unslotted guide pole.<br>Seal Configuration = Mechanical shoe primary seal and a secondary seal. |
| GRP-TANK7 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Today's Date = Today's date is March 1, 2013 or later.<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Tank using a submerged fill pipe |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia<br>Product Stored = VOC other than crude oil or condensate<br>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons |
| GRP-TANK7 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK7 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-TANK8 | 30 TAC Chapter 115, Storage of VOCs | 115B-1 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Tank Description = Tank does not require emission controls<br>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia<br>Product Stored = VOC other than crude oil or condensate<br>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons |
| GRP-TANK8 | 40 CFR Part 60, Subpart K | 60K-2 | Construction/Modification Date = On or before June 11, 1973 |
| GRP-TANK8 | 40 CFR Part 61, Subpart FF | 61FF-1 | Waste Treatment Tank = The tank does not manage, treat or store a waste stream subject to 40 CFR Part 61, Subpart FF. |
| GRP-TANK8 | 40 CFR Part 61, Subpart Y | 61Y-1 | Tank Type = The storage tank or vessel stores benzene which is not within specific gravities defined in 40 CFR § 61.270(a) |
| GRP-LOAD | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-1 | Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.<br>Transfer Type = Only loading.<br>True Vapor Pressure = True vapor pressure less than 0.5 psia. |
| GRP-LOAD | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Ethylene production.<br>True Vapor Pressure = The true vapor pressure ofthe loaded material is at least 3.4 kPa (0.5 psi).<br>Average Volume Transferred = Volume transferred is at least 76 $m^3$ per day (20,077 gallons per day), averaged over any 30 consecutive days. |
| MOTORFUEL | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-1 | Chapter 115 Facility Type = Motor vehicle fuel dispensing facility |
| OSDOCKFLR | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-1 | Chapter 115 Control Device Type = Vapor control system with a flare.<br>Chapter 115 Facility Type = Marine terminal<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | disconnected.<br>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.<br>Marine Terminal Exemptions = The marine terminal is claiming one or more of the exemptions in 30 TAC § 115.217(a)(5)(B).<br>Transfer Type = Only loading.<br>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.<br>VOC Flash Point = Flash point less than 150° F.<br>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(B), (b)(3)(B), (a)(2)(A), and (b)(3)(A) exemptions do not apply to marine terminals or gasoline terminals.<br>Uncontrolled VOC Emissions = Uncontrolled VOC emissions are less than 100 tpy.<br>Control Options = Vapor control system that maintains a control efficiency of at least 90%. |
| OSDOCKFLR | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-2 | Chapter 115 Control Device Type = Vapor control system with a flare.<br>Chapter 115 Facility Type = Marine terminal<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.<br>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.<br>Marine Terminal Exemptions = The marine terminal is not claiming one or more of the exemptions in 30 TAC § 115.217(a)(5)(B).<br>Transfer Type = Only loading.<br>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.<br>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(B), (b)(3)(B), (a)(2)(A), and (b)(3)(A) exemptions do not apply to marine terminals or gasoline terminals.<br>Control Options = Vapor control system that maintains a control efficiency of at least 90%. |
| OSDOCKFLR | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-3 | Chapter 115 Facility Type = Marine terminal<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Product Transferred = Liquefied petroleum gas (LPG)<br>Transfer Type = Only loading. |
| OSDOCKFLR | 40 CFR Part 63, Subpart Y | 63Y-1 | Subpart Y Facility Type = Existing onshore loading terminal (located onshore or less than 0.5 miles from shore).<br>Ballasting Operations = Operations other than or in addition to ballasting operations are performed at the facility.<br>Vapor Pressure = Vapor pressure is greater than or equal to 10.3 kilopascals (1.5 psia) at standard conditions, 20° C and 760 mm Hg.<br>Subpart BB Applicability = Marine vessel loading operations are not subject to and complying with 40 CFR Part 61, Subpart BB.<br>Material Loaded = Material other than crude oil or gasoline.<br>HAP Impurities Only = Marine vessel loading operations at loading berths transfer liquids containing organic hazardous air pollutants other than as impurities.<br>Source Emissions = Source with emissions less than 10 and 25 tons. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| OSDOCKFLR | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Ethylene production.<br>True Vapor Pressure = The true vapor pressure ofthe loaded material is at least 3.4 kPa (0.5 psi).<br>Average Volume Transferred = Volume transferred is at least 76 $m^3$ per day (20,077 gallons per day), averaged over any 30 consecutive days. |
| OSLPGTRUCK | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-1 | Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.<br>Transfer Type = Loading and unloading.<br>True Vapor Pressure = True vapor pressure less than 0.5 psia. |
| OSRRFLARE | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-1 | Chapter 115 Control Device Type = No control device.<br>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.<br>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.<br>Transfer Type = Loading and unloading.<br>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.<br>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.<br>Control Options = Vapor control system that maintains a control efficiency of at least 90%. |
| OSRRFLARE | 30 TAC Chapter 115, Loading and Unloading of VOC | 115C-2 | Chapter 115 Control Device Type = Vapor control system with a flare.<br>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.<br>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.<br>Transfer Type = Loading and unloading.<br>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.<br>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.<br>Control Options = Pressurized loading system. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| OSRRFLARE | 40 CFR Part 63, Subpart G | 63G-1 | Control Device = Flare.<br>Halogenated Emissions = There are no halogenated emission streams from the transfer rack.<br><br>Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).<br>Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.<br>Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).<br>Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.<br>Closed Vent System = Closed vent system is operated and maintained under negative pressure. |
| OSRRFLARE | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Ethylene production.<br>True Vapor Pressure = The true vapor pressure ofthe loaded material is at least 3.4 kPa (0.5 psi).<br>Average Volume Transferred = Volume transferred is at least 76 $m^3$ per day (20,077 gallons per day), averaged over any 30 consecutive days. |
| GRP-FURNACE1 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.<br>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2)<br>NOx Reduction = Post combustion control technique with ammonia injection<br>Fuel Type #1 = Natural gas<br>NH3 Monitoring = Continuous emission monitoring system.<br>NOx Monitoring System = Continuous emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE1 | 30 TAC Chapter 117, Subchapter B | 117B-2 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.<br>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2)<br>NOx Reduction = Post combustion control technique with ammonia injection<br>Fuel Type #1 = Natural gas<br>NH3 Monitoring = Continuous emission monitoring system.<br>Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases<br>NOx Monitoring System = Continuous emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE1 | 30 TAC Chapter 117, Subchapter B | 117B-3 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.<br>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2)<br>NOx Reduction = Post combustion control technique with ammonia injection<br>Fuel Type #1 = Gaseous fuel other than natural gas, landfill gas, or renewable non-fossil fuel gases.<br>NH3 Monitoring = Continuous emission monitoring system.<br>NOx Monitoring System = Continuous emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE2 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 100 MMBtu/hr, but less than 200 MMBtu/hr.<br>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Natural gas<br>NOx Monitoring System = Continuous emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-FURNACE2 | 30 TAC Chapter 117, Subchapter B | 117B-2 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 100 MMBtu/hr, but less than 200 MMBtu/hr.<br>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Natural gas<br>Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases<br>NOx Monitoring System = Continuous emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE2 | 30 TAC Chapter 117, Subchapter B | 117B-3 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 100 MMBtu/hr, but less than 200 MMBtu/hr.<br>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Gaseous fuel other than natural gas, landfill gas, or renewable non-fossil fuel gases.<br>NOx Monitoring System = Continuous emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE3 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Process heater<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr.<br>CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS.<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Natural gas |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000]<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE3 | 30 TAC Chapter 117, Subchapter B | 117B-2 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Process heater<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr.<br>CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS.<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Natural gas<br>Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases<br>NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000]<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE3 | 30 TAC Chapter 117, Subchapter B | 117B-3 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Process heater<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr.<br>CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS.<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Gaseous fuel other than natural gas, landfill gas, or renewable non-fossil fuel gases.<br>NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000]<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE3 | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-1 | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. |
| GRP-FURNACE4 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.<br>CO Monitoring System = Predictive emission monitoring system complying with 30 TAC § 117.8100(b). |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Natural gas<br>NOx Monitoring System = Predictive emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE4 | 30 TAC Chapter 117, Subchapter B | 117B-2 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.<br>CO Monitoring System = Predictive emission monitoring system complying with 30 TAC § 117.8100(b).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Natural gas<br>Fuel Type #2 = Gaseous fuel other than natural gas, landfill gas or renewable non-fossil fuel gases<br>NOx Monitoring System = Predictive emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| GRP-FURNACE4 | 30 TAC Chapter 117, Subchapter B | 117B-3 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Unit Type = Pyrolysis reactor<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.<br>CO Monitoring System = Predictive emission monitoring system complying with 30 TAC § 117.8100(b).<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Gaseous fuel other than natural gas, landfill gas, or renewable non-fossil fuel gases.<br>NOx Monitoring System = Predictive emissions monitoring system<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| SHRFEEDHTR | 30 TAC Chapter 117, Subchapter B | 117B-1 | Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Unit Type = Process heater<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option<br>Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr.<br>CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS.<br>NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average<br>NOx Reduction = No $NO_x$ control method<br>Fuel Type #1 = Natural gas<br>NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000]<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8) |
| SHRFEEDHTR | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-1 | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. |
| DB901B | 30 TAC Chapter 111, Incineration | 111A-1 | Hazardous Waste = The unit does not meet the criteria for regulation under 30 TAC Chapter 111, Subchapter A, Division 2: Incineration. |
| DB901B | 30 TAC Chapter 117, Subchapter B | 117B-1 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Predictive emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| DB901B | 30 TAC Chapter 117, Subchapter B | 117B-2 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Predictive emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1). |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| DB901B | 30 TAC Chapter 117, Subchapter B | 117B-3 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Predictive emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| DB901B | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-1 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. |
| DB901C | 30 TAC Chapter 111, Incineration | 111A-1 | Hazardous Waste = The unit does not meet the criteria for regulation under 30 TAC Chapter 111, Subchapter A, Division 2: Incineration. |
| DB901C | 30 TAC Chapter 117, Subchapter B | 117B-1 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | NOx Reductions = Water or steam injection.<br>Annual Heat Input = Annual heat input is greater than 2.2($10^{11}$) Btu/yr, based on rolling 12-month average. |
| DB901C | 30 TAC Chapter 117, Subchapter B | 117B-2 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = Water or steam injection.<br>Annual Heat Input = Annual heat input is greater than 2.2($10^{11}$) Btu/yr, based on rolling 12-month average. |
| DB901C | 30 TAC Chapter 117, Subchapter B | 117B-3 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = Water or steam injection.<br>Annual Heat Input = Annual heat input is greater than 2.2($10^{11}$) Btu/yr, based on rolling 12-month average. |
| DB901C | 30 TAC Chapter 117, Subchapter B | 117B-4 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>Fuel Type #2 = Landfill gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = Water or steam injection.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| DB901C | 30 TAC Chapter 117, Subchapter B | 117B-5 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Landfill gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = Water or steam injection.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| DB901C | 30 TAC Chapter 117, Subchapter B | 117B-6 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Fuel Type #3 = Landfill gas.<br>NOx Reductions = Water or steam injection.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| DB901C | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-1 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. |
| GRP-BOILER1 | 30 TAC Chapter 111, Incineration | 111A-1 | Hazardous Waste = The unit does not meet the criteria for regulation under 30 TAC Chapter 111, Subchapter A, Division 2: Incineration. |
| GRP-BOILER1 | 30 TAC Chapter 117, Subchapter B | 117B-1 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GRP-BOILER1 | 30 TAC Chapter 117, Subchapter B | 117B-2 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
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| GRP-BOILER1 | 30 TAC Chapter 117, Subchapter B | 117B-3 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GRP-BOILER1 | 30 TAC Chapter 117, Subchapter B | 117B-4 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>Fuel Type #2 = Landfill gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GRP-BOILER1 | 30 TAC Chapter 117, Subchapter B | 117B-5 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1). |

| Unit ID | Regulation | Index Number | Basis of Determination* |
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| | | | EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Landfill gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GRP-BOILER1 | 30 TAC Chapter 117, Subchapter B | 117B-6 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>Fuel Type #3 = Landfill gas.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GRP-BOILER1 | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-1 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. |
| GT-1B | 30 TAC Chapter 111, Incineration | 111A-1 | Hazardous Waste = The unit does not meet the criteria for regulation under 30 TAC Chapter 111, Subchapter A, Division 2: Incineration. |
| GT-1B | 30 TAC Chapter 117, Subchapter B | 117B-1 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 200 MMBtu/hr but less than 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Fuel Type #1 = Natural gas.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GT-1B | 30 TAC Chapter 117, Subchapter B | 117B-2 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 200 MMBtu/hr but less than 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Natural gas.<br>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GT-1B | 30 TAC Chapter 117, Subchapter B | 117B-3 | NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].<br>Unit Type = Other industrial, commercial, or institutional boiler.<br>Maximum Rated Capacity = MRC is greater than or equal to 200 MMBtu/hr but less than 250 MMBtu/hr.<br>NOx Monitoring System = Continuous emissions monitoring system.<br>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Fuel Type #1 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.<br>NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.<br>NOx Reductions = No $NO_x$ reduction.<br>Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average. |
| GT-1B | 40 CFR Part 60, Subpart Db | 60Db-1 | Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a $NO_x$ emission limit that applies specifically when the byproduct/waste is combusted.<br>Construction/Modification Date = After June 19, 1984, and on or before June 19, 1986. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
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| | | | D-Series Fuel Type #1 = Natural gas.<br>Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW).<br>PM Monitoring Type = No particulate monitoring.<br>Opacity Monitoring Type = No particulate (opacity) monitoring.<br>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.<br>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.<br>NOx Monitoring Type = Continuous emission monitoring system.<br>Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.<br>SO2 Monitoring Type = No $SO_2$ monitoring.<br>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.<br>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.<br>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.<br>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.<br>Technology Type = None.<br>ACF Option - SO2 = Other ACF or no ACF.<br>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.<br>Unit Type = Duct burner as part of combined cycle system (compliance on a 30-day rolling average basis determined by using a continuous emission monitoring system).<br>ACF Option - PM = Other ACF or no ACF.<br>60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.<br>ACF Option - NOx = Other ACF or no ACF.<br>60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative. |
| GT-1B | 40 CFR Part 60, Subpart Db | 60Db-2 | Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a $NO_x$ emission limit that applies specifically when the byproduct/waste is combusted.<br>Construction/Modification Date = After June 19, 1984, and on or before June 19, 1986.<br>D-Series Fuel Type #1 = Natural gas.<br>D-Series Fuel Type #2 = Byproduct/waste.<br>Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW).<br>PM Monitoring Type = No particulate monitoring.<br>Opacity Monitoring Type = No particulate (opacity) monitoring.<br>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.<br>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject |

| Unit ID | Regulation | Index Number | Basis of Determination* |
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| | | | to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.<br>NOx Monitoring Type = Continuous emission monitoring system.<br>Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.<br>SO2 Monitoring Type = No $SO_2$ monitoring.<br>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.<br>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.<br>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.<br>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.<br>Technology Type = None.<br>ACF Option - SO2 = Other ACF or no ACF.<br>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.<br>Unit Type = Duct burner as part of combined cycle system (compliance on a 30-day rolling average basis determined by using a continuous emission monitoring system).<br>ACF Option - PM = Other ACF or no ACF.<br>60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.<br>ACF Option - NOx = Other ACF or no ACF.<br>60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative. |
| GT-1B | 40 CFR Part 60, Subpart Db | 60Db-3 | Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a $NO_x$ emission limit that applies specifically when the byproduct/waste is combusted.<br>Construction/Modification Date = After June 19, 1984, and on or before June 19, 1986.<br>D-Series Fuel Type #1 = Byproduct/waste.<br>Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW).<br>PM Monitoring Type = No particulate monitoring.<br>Opacity Monitoring Type = No particulate (opacity) monitoring.<br>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.<br>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.<br>NOx Monitoring Type = Continuous emission monitoring system.<br>Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.<br>SO2 Monitoring Type = No $SO_2$ monitoring.<br>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.<br>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. |

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| | | | Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.<br>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.<br>Technology Type = None.<br>ACF Option - SO2 = Other ACF or no ACF.<br>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.<br>Unit Type = Duct burner as part of combined cycle system (compliance on a 30-day rolling average basis determined by using a continuous emission monitoring system).<br>ACF Option - PM = Other ACF or no ACF.<br>60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.<br>ACF Option - NOx = Other ACF or no ACF.<br>60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative. |
| GT-1B | 40 CFR Part 63, Subpart DDDDD | 63DDDDD-1 | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. |
| GRP-FLARE | 30 TAC Chapter 111, Visible Emissions | 111A-1 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.<br>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. |
| GRP-FLARE | 30 TAC Chapter 115, HRVOC Vent Gas | 115H-1 | Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d).<br>Out of Service = Flare was not permanently out of service by April 1, 2006.<br>Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.<br>Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.<br>Multi-Purpose Usage = Flare is used for abatement of emissions from marine loading or transport vessel loading and unloading operations AND for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.<br>Flow Rate = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1).<br>Alternative Monitoring = No alternative monitoring and test methods are used.<br>Physical Seal = Flare is equipped with a flow monitor or indicator.<br>Monitoring Operations = Using the flow monitoring requirements in § 115.725(d)(1)<br>§115.725(h)(4) Alternative = Using the continuous monitoring requirements in § 115.725(d)(2).<br>Minor Modification = No minor modifications to the monitoring and test methods are used.<br>Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.<br>Flare Type = Flare is in multi-purpose service. |
| GRP-FLARE | 40 CFR Part 60, Subpart A | 60A-1 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.<br>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). |

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| | | | Flare Assist Type = Steam-assisted<br>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) |
| GRP-FLARE | 40 CFR Part 60, Subpart A | 60A-2 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.<br>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).<br>Flare Assist Type = Steam-assisted<br>Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).<br>Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm). |
| GRP-FLARE | 40 CFR Part 63, Subpart A | 63A-1 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.<br>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).<br>Flare Assist Type = Steam assisted<br>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) |
| GRP-FLARE | 40 CFR Part 63, Subpart A | 63A-2 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.<br>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).<br>Flare Assist Type = Steam assisted<br>Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).<br>Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm). |
| P-TANKFARM | 30 TAC Chapter 111, Visible Emissions | 111A-1 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.<br>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. |
| P-TANKFARM | 40 CFR Part 60, Subpart A | 60A-1 | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.<br>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).<br>Flare Assist Type = Air-assisted |
| P-TANKFARM | 40 CFR Part 63, Subpart A | 63A-1 | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.<br>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).<br>Flare Assist Type = Air assisted |
| GT-1 | 30 TAC Chapter 117, Subchapter B | 117B-1 | Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).<br>Megawatt Rating = MR is greater than or equal to 30 MW.<br>CO Emission Limitation = Title 30 TAC § 117.310(c)(1). |

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| | | | EGF System Cap Unit = The engine is not used as an electric generating facility to generate electricity for sale to the electric grid.<br>Averaging Method = Complying with the applicable emission limits using a block one-hour average.<br>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).<br>NOx Reduction = Post combustion control method other than ammonia injection, injection of a chemical reagent other than ammonia, or water or steam injection.<br>Service Type = Stationary gas turbine.<br>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).<br>NOx Monitoring System = Continuous emissions monitoring system. |
| GT-1 | 40 CFR Part 60, Subpart GG | 60GG-1 | Duct Burner = The turbine is part of a combined cycle turbine system equipped with supplemental heat (duct burner).<br>Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr)<br>Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004.<br>NOx Allowance = The owner or operator is not electing to use a $NO_x$ allowance in determining emission limits in 40 CFR § 60.332(a).<br>Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.<br>Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam.<br>Fuel Type Fired = Natural gas meeting the definition in § 60.331(u).<br>Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation.<br>Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage.<br>Fuel Monitoring Schedule = Previously approved custom fuel monitoring schedule.<br>Manufacturer's Rated Base Load = Base load is greater than 30 MW. |
| FUGITIVES | 30 TAC Chapter 115, HRVOC Fugitive Emissions | 115H-1 | Agitators = The fugitive unit does not contain agitators.<br>Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358.<br>Compressor Seals = The fugitive unit contains compressor seals.<br>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.<br>Process Drains = The fugitive unit contains process drains.<br>Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC.<br>Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves.<br>ACR = No open-ended valves or lines are complying with an alternate control requirement.<br>Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service.<br>Weight Percent HRVOC = Components in the fugitive unit contact process fluids that contain less than 5.0% HRVOC by weight and process fluids that contain HRVOC at 5.0%, or greater, by weight on an annual average basis.<br>Complying with § 115.781(b)(9) = Process drains are complying with the requirements of § 115.781(b)(9).<br>Pumps with Shaft Seal System = Pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.<br>Bypass Line Valves = The fugitive unit does not contain bypass line valves. |

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| | | | Compressors with Shaft Seal System = Compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.<br>Flanges or Other Connectors = The fugitive unit contains flanges or other connectors.<br>Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators.<br>Pressure Relief Valves = The fugitive unit contains pressure relief valves.<br>Pump Seals = The fugitive unit contains pump seals.<br>ACR = No pressure relief valves are complying with an alternate control requirement.<br>Agitators with Shaft Seal System = Agitators are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.<br>Complying with § 115.781(b)(9) = Pressure relief valves are complying with the requirements of § 115.781(b)(9). |
| FUGITIVES | 30 TAC Chapter 115, Pet. Refinery & Petrochemicals | 115D-1 | Compressor Seals = The fugitive unit contains compressor seals.<br>Flanges = The fugitive unit contains flanges.<br>Open-ended Valves = The fugitive unit contains open-ended valves.<br>Pressure Relief Valves = The fugitive unit contains pressure relief valves.<br>Process Drains = The fugitive unit has process drains.<br>Pump Seals = The fugitive unit contains pump seals.<br>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.<br>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.<br>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.<br>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested.<br>Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.<br>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.<br>Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.<br>Weight Percent VOC = Components in the fugitive unit contact process fluids that contain less than 10% VOC by weight and process fluids that contains VOC at 10%, or greater, by weight.<br>Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).<br>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.<br>TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.<br>TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.<br>TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Flanges contact a process fluid containing VOC having a true vapor pressures |

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| | | | less than or equal to 0.044 psia at 68 degrees Fahrenheit.<br>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).<br>TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.<br>TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.<br>Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1). |
| FUGITIVES | 40 CFR Part 60, Subpart VV | 60VV-1 | Closed Vent (or Vapor Collection) Systems = The fugitive unit contains closed vent or vapor collection systems.<br>Compressors = The fugitive unit contains compressors.<br>Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices.<br>Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service.<br>Flare = The fugitive unit contains flares.<br>Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service.<br>Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.<br>Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service.<br>Sampling Connection Systems = The fugitive unit contains sampling connection systems.<br>Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service.<br>Vapor Recovery System = The fugitive unit contains vapor recovery systems.<br>2.0% = The fugitive unit is not complying with an allowable percentage of valves leaking equal to or less than 2.0%.<br>Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2).<br>Equivalent Emission Limitation = No equivalent emission limitation is used for pressure relief devices in heavy or light liquid service.<br>Vacuum Service = The fugitive unit contains equipment in vacuum service.<br>Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006.<br>Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service.<br>VOC Service = Fugitive unit contains equipment designed to operate in VOC service less than 300 hours per year.<br>Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.<br>Complying with 40 CFR § 60.482-10 = No enclosed combustion devices are complying with § 60.482-10.<br>Complying with 40 CFR § 60.482-10 = Vapor recovery systems are complying with § 60.482-10.<br>Complying with 40 CFR § 60.482-3 = Compressors are complying with § 60.482-3.<br>Complying with 40 CFR § 60.482-5 = Sampling connection systems are complying with § 60.482-5.<br>Complying with 40 CFR § 60.482-8 = Pressure relief devices in heavy or light liquid service are complying with the requirements of § 60.482-8.<br>Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service.<br>Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7. |

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| | | | Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.<br>Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service.<br>Flanges and Other Connectors = The fugitive unit contains flanges and other connectors.<br>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.<br>Pressure Relief Devices in Gas/Vapor Service = The fugitive unit contains pressure relief devices in gas/vapor service.<br>Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service.<br>Equivalent Emission Limitation = No equivalent emission limitation is used for open-ended valves or lines.<br>Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.<br>Beverage Alcohol Production = The facility does not produce only beverage alcohol.<br>Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.<br>Complying with 40 CFR § 60.482-6 = Open-ended valves or lines are complying with § 60.482-6.<br>Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8. |
| FUGITIVES | 40 CFR Part 63, Subpart FFFF | 63FFFF-1 | Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit. |
| FUGITIVES | 40 CFR Part 63, Subpart H | 63H-1 | ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT<br>ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT<br>BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE<br>EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE<br>GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT<br>LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT<br>HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT<br>HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT NOT PRESENT<br>HEAVY LIQUID SERVICE (PUMPS) = COMPONENT NOT PRESENT<br>NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES<br>RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT<br>UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT<br>ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT<br>DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT<br>GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT<br>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS |

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| | | | VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE<br>ANY (COMPRESSORS) = COMPONENT PRESENT<br>EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS<br>ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT<br>HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT NOT PRESENT<br>HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT<br>LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR<br>ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT<br>GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT<br>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES<br>AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL)<br>FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT<br>GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT<br>HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT NOT PRESENT<br>LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT<br>HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT<br>HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT<br>ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT<br>HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT NOT PRESENT |
| FUGITIVES | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Ethylene Production.<br>Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate. |
| FUG-SCR | 30 TAC Chapter 115, Pet. Refinery & Petrochemicals | 115D-1 | Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.<br>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.<br>Weight Percent VOC = All components only contact a process fluid that contains less than 10% VOC by weight. |
| GRP-TOWER | 30 TAC Chapter 115, HRVOC Cooling Towers | 115H-1 | Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.<br>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.<br>Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.<br>Design Capacity = Design capacity to circulate 8000 gpm or greater.<br>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).<br>Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.<br>Flow Monitoring/Testing Method = Choosing to use the maximum potential flow rate based on the manufacturer's pump performance data |

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| | | | in accordance with §115.764(e)(1).<br>Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).<br>On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used. |
| GRP-TOWER | 30 TAC Chapter 115, HRVOC Cooling Towers | 115H-2 | Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.<br>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.<br>Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.<br>Design Capacity = Design capacity to circulate 8000 gpm or greater.<br>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).<br>Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.<br>Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1).<br>Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).<br>On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used. |
| GRP-TOWER | 40 CFR Part 63, Subpart FFFF | 63FFFF-1 | Monitoring = The cooling water is being monitored for the presence of HAPs or other representative substances that would indicate a leak. |
| GRP-TOWER | 40 CFR Part 63, Subpart Q | 63Q-1 | Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994. |
| GRP-TOWER | 40 CFR Part 63, Subpart YY | 63YY-1 | Heat Exchange System = The cooling tower/heat exchange system is subject to the requirements of 40 CFR § 63.1100(e). |
| GRP-SEPARATOR1 | 30 TAC Chapter 115, Water Separation | 115B-1 | Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.<br>Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment. |
| GRP-SEPARATOR1 | 40 CFR Part 63, Subpart VV | 63VV-1 | Control = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator. |
| GRP-SEPARATOR2 | 30 TAC Chapter 115, Water Separation | 115B-1 | Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.<br>Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment. |
| GRP-SEPARATOR2 | 40 CFR Part 63, Subpart VV | 63VV-1 | Control = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator. |
| GRP-SEPARATOR2 | 40 CFR Part 63, Subpart YY | 63YY-1 | Facility Type = ETHYLENE PRODUCTION FACILITY<br>Process Wastewater = OIL-WATER SEPARATOR RECEIVES, MANAGES OR TREATS A PROCESS WASTEWATER STREAM AS DEFINED IN 40 CFR § 63.1101 |

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| | | | Meets 40 CFR § 63.149(d) = OIL-WATER SEPARATOR DOES NOT MEET THE CRITERIA OF 40 CFR § 63.1106(C)(3) OR (C)(4)(I) |
| DCOKEDRUM5 | 30 TAC Chapter 111, Nonagricultural Processes | 111A-1 | Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b). |
| DCOKEDRUM5 | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).<br>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected. |
| GRP-VENT1 | 30 TAC Chapter 111, Visible Emissions | 111A-1 | Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.<br>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.<br>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).<br>Construction Date = After January 31, 1972<br>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute. |
| GRP-VENT1 | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. |
| GRP-VENT2 | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).<br>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected. |

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| GRP-VENT3 | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).<br>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected. |
| GRP-VENT3 | 30 TAC Chapter 115, Vent Gas Controls | 115B-2 | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).<br>VOC Concentration = VOC concentration is less than 612 ppmv.<br>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected. |
| GRP-VENT4 | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).<br>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected. |
| GRP-VENT4 | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Ethylene production |
| GRP-VENT5 | 30 TAC Chapter 115, HRVOC Vent Gas | 115H-1 | HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.<br>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).<br>Exempt Date = The vent gas stream is not exempt.<br>Vent Gas Stream Control = Vent gas stream is controlled by a flare. |

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| GRP-VENT5 | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Alternate Control Requirement = Alternate control is not used.<br>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Control Device Type = Smokeless flare<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).<br>VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.<br>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected. |
| GRP-VENT5 | 40 CFR Part 63, Subpart FFFF | 63FFFF-1 | Designated Grp1 = The emission stream is designated as Group 1.<br>Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control.<br>Designated Hal = The emission stream is not designated as halogenated.<br>Determined Hal = The emission stream is determined to be non-halogenated.<br>Prior Eval = The data from a prior evaluation or assessment is not used.<br>Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or a waiver has not been requested.<br>Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.<br>Bypass Line = No bypass lines. |
| GRP-VENT5 | 40 CFR Part 63, Subpart G | 63G-1 | Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.<br>Control Device = Flare<br>Overlap = Title 40 CFR Part 63, Subpart G only<br>Group 1 = The process vent meets the definition of a Group 1 process vent.<br>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.<br>Halogenated = Vent stream is not halogenated.<br>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. |
| GRP-VENT5 | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Ethylene production |
| GRP-VENT6 | 30 TAC Chapter 111, Nonagricultural Processes | 111A-1 | Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b). |
| GRP-VENT6 | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. |

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| | | | Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).<br>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected. |
| P-1OLEFVENT | 30 TAC Chapter 115, HRVOC Vent Gas | 115H-1 | HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.<br>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).<br>Exempt Date = The vent gas stream is not exempt.<br>Vent Gas Stream Control = Vent gas stream is controlled by a flare. |
| P-1OLEFVENT | 30 TAC Chapter 115, Vent Gas Controls | 115B-1 | Alternate Control Requirement = Alternate control is not used.<br>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.<br>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.<br>Control Device Type = Smokeless flare<br>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.<br>Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).<br>VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.<br>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected. |
| P-1OLEFVENT | 40 CFR Part 63, Subpart FFFF | 63FFFF-1 | Designated Grp1 = The emission stream is designated as Group 1.<br>Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control.<br>Designated Hal = The emission stream is not designated as halogenated.<br>Determined Hal = The emission stream is determined to be non-halogenated.<br>Prior Eval = The data from a prior evaluation or assessment is not used.<br>Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or a waiver has not been requested.<br>Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.<br>Bypass Line = No bypass lines. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| P-1OLEFVENT | 40 CFR Part 63, Subpart G | 63G-1 | Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.<br>Control Device = Flare<br>Overlap = Title 40 CFR Part 63, Subpart G only<br>Group 1 = The process vent meets the definition of a Group 1 process vent.<br>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.<br>Halogenated = Vent stream is not halogenated.<br>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. |
| P-1OLEFVENT | 40 CFR Part 63, Subpart YY | 63YY-1 | Source Type = Ethylene production |
| GRP-DEGREASER1 | 30 TAC Chapter 115, Degreasing Processes | 115E-1 | Solvent Degreasing Machine Type = Cold solvent cleaning machine.<br>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.<br>Solvent Sprayed = A solvent is sprayed.<br>Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.<br>Solvent Heated = The solvent is not heated to a temperature greater than 120° F.<br>Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.<br>Drainage Area = Area is greater than or equal to 16 square inches.<br>Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers. |
| GRP-DEGREASER1 | 40 CFR Part 63, Subpart T | 63T-1 | Solvent Type = The unit does not use any of the following halogenated HAP solvents: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform in a total concentration greater than 5% by weight. |
| GRP-DEGREASER2 | 30 TAC Chapter 115, Degreasing Processes | 115E-1 | Solvent Degreasing Machine Type = Remote reservoir cold solvent cleaning machine.<br>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.<br>Solvent Sprayed = A solvent is sprayed.<br>Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.<br>Solvent Heated = The solvent is not heated to a temperature greater than 120° F.<br>Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.<br>Drainage Area = Area is less than 16 square inches.<br>Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers. |
| GRP-DEGREASER2 | 40 CFR Part 63, Subpart T | 63T-1 | Solvent Type = The unit does not use any of the following halogenated HAP solvents: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform in a total concentration greater than 5% by weight. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-DISTILL | 40 CFR Part 60, Subpart NNN | 60NNN-1 | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.<br>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.<br>Construction/Modification Date = After December 30, 1983.<br>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.<br>Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr).<br>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.<br>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).<br>Total Design Capacity = 1 gigagram per year or greater.<br>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min. |
| GRP-DISTILL | 40 CFR Part 60, Subpart NNN | 60NNN-2 | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.<br>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.<br>Construction/Modification Date = After December 30, 1983.<br>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.<br>Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr).<br>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.<br>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).<br>Total Design Capacity = 1 gigagram per year or greater.<br>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min. |
| GRP-DISTILL | 40 CFR Part 60, Subpart NNN | 60NNN-3 | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.<br>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.<br>Construction/Modification Date = After December 30, 1983.<br>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.<br>Subpart NNN Control Device = Flare.<br>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.<br>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).<br>Total Design Capacity = 1 gigagram per year or greater.<br>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRP-REACTOR1 | 40 CFR Part 60, Subpart RRR | 60RRR-1 | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.<br>Construction/Modification Date = After June 29, 1990.<br>Affected Facility Type = Reactor process not discharging its vent stream into a recovery system.<br>Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD.<br>Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN and has no other releases to the air except for a pressure relief valve. |
| GRP-TREAT | 40 CFR Part 61, Subpart FF | 61FF-1 | AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used.<br>By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device.<br>Continuous Monitoring = The wastewater treatment system unit process parameters are continuously monitored to indicate proper system operation.<br>Complying with § 61.342(e) = The facility is complying with 40 CFR § 61.342(e).<br>Control Device Type/Operation = Flare.<br>Openings = The treatment process or wastewater treatment system unit has openings.<br>Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system.<br>Benzene Removal = Benzene is removed from the waste stream to a level of less than 10 ppmw on a flow weighted annual average basis.<br>Less Than Atmospheric = A cover and closed-vent system are operated such that the treatment process or wastewater system unit is maintained at ambient atmospheric pressure.<br>Closed-Vent System and Control Device = A closed-vent system and control device is used.<br>Process Or Stream Exemption = The treatment process or waste stream is not complying with 40 CFR §61.348(d).<br>AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used.<br>Treatment Process Engineering Calculations = Engineering calculations show that the treatment process or wastewater treatment system unit is proven to achieve its emission limitation. |
| GRP-TREAT | 40 CFR Part 63, Subpart FFFF | 63FFFF-1 | Halogenated = The stream is determined as non-halogenated.<br>Series Of Processes = The wastewater stream is treated using a series of treatment processes.<br>Vented To Control = Emissions from the treatment process are vented to a control device.<br>Hard Piping = The wastewater stream for a combination of treatment processes is conveyed by hard piping.<br>Alt 63G Mon Parameters = The EPA Administrator has not approved an alternate monitoring parameter or no alternate has been requested.<br>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148.<br>Compliance Under Title 40 CFR § 63.138(a)(7)(ii) = The owner operator elects to comply with Title 40 CFR § 63.138(a)(7)(ii).<br>By-pass Lines = No by-pass lines.<br>Series Design Evaluation = Compliance for the series of treatment processes is demonstrated using performance testing. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Combination Of Control Devices = The vent stream is treated using a single control device.<br>Control Devices = Flare. |
| GRP-TREAT | 40 CFR Part 63, Subpart YY | 63YY-1 | Facility Type = ETHYLENE PRODUCTION FACILITY |
| GRP-PROCESS1 | 40 CFR Part 63, Subpart F | 63F-1 | Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).<br>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.<br>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.<br>Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.<br>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.<br>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.<br>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).<br>Heat Exchange System = A heat exchange system is utilized.<br>Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.<br>Cooling Water Monitored = The cooling water is not being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.<br>Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side. |
| GRP-PROCESS2 | 40 CFR Part 63, Subpart YY | 63YY-1 | Research and Development = THE PROCESS UNIT IS USED IN PRODUCTION<br>Flexible Unit = THE PROCESS UNIT IS OPERATED AS A FLEXIBLE PROCESS UNIT<br>Primary Product = THE PRIMARY PRODUCT OF THE PROCESS UNIT IS A PRODUCT PRODUCED BY A REGULATED SOURCE CATEGORY<br>Source Category = ETHYLENE PRODUCTION |
| PRO-SSMON | 40 CFR Part 63, Subpart FFFF | 63FFFF-1 | >1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr.<br>Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less.<br>Startup 2003 = The affected source startup was before November 10, 2003.<br>Other Operations = The MCPU includes operations other than those listed in § 63.2435(c).<br>Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63.<br>63.100 CMPU = The MCPU is not a CMPU defined in § 63.100. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | New Source = The MCPU is an existing affected source.<br>PUG = The MCPU is not part of a process unit group (PUG).<br>G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr.<br>Startup 2002 = The affected source initial startup was before April 4, 2002.<br>PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7.<br>Batch Process Vents = The source does not include batch process vents. |

* - The “unit attributes” or operating conditions that determine what requirements apply.

**NSR vs. Title V FOP**

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

| NSR Permit | Federal Operating Permit(FOP) |
|---|---|
| Issued Prior to new Construction or modification of an existing facility | For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation. |
| Authorizes air emissions | Codifies existing applicable requirements, does not authorize new emissions |
| Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented. | Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP. |
| Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations. | One public notice required. Opportunity for public comments. No contested case hearings. |
| Applies to all point source emissions in the state. | Applies to all major sources and some non-major sources identified by the EPA. |
| Applies to facilities: a portion of site or individual emission sources | One or multiple FOPs cover the entire site (consists of multiple facilities) |
| Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis. | Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site. |
| Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources. | Opportunity for EPA review, Affected states review, and a Public petition period for every FOP. |
| Permits have a table listing maximum emission limits for pollutants | Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements. |
| Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin. | Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated. |
| NSR permits are issued independent of FOP requirements. | FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference |

**New Source Review Requirements**

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

**New Source Review Authorization References**

| | |
|---|---|
| **Prevention of Significant Deterioration (PSD) Permits** | |
| PSD Permit No.: PSDTX854M2 | Issuance Date: 12/21/2015 |
| **Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.** | |
| Authorization No.: 101 | Issuance Date: 08/29/2014 |
| Authorization No.: 71820 | Issuance Date: 04/30/2014 |
| Authorization No.: 76394 | Issuance Date: 08/26/2015 |
| Authorization No.: 95 | Issuance Date: 12/21/2015 |
| Authorization No.: 97769 | Issuance Date: 09/26/2012 |
| **Permits By Rule (30 TAC Chapter 106) for the Application Area** | |
| Number: 106.124 | Version No./Date: 09/04/2000 |
| Number: 106.261 | Version No./Date: 11/01/2003 |
| Number: 106.262 | Version No./Date: 11/01/2003 |
| Number: 106.263 | Version No./Date: 11/01/2001 |
| Number: 106.371 | Version No./Date: 09/04/2000 |
| Number: 106.412 | Version No./Date: 09/04/2000 |
| Number: 106.454 | Version No./Date: 11/01/2001 |
| Number: 106.472 | Version No./Date: 09/04/2000 |
| Number: 106.478 | Version No./Date: 09/04/2000 |
| Number: 106.511 | Version No./Date: 09/04/2000 |
| Number: 106.512 | Version No./Date: 06/13/2001 |

**New Source Review Authorization References**

| | |
|---|---|
| Number: 5 | Version No./Date: 07/20/1992 |
| Number: 5 | Version No./Date: 04/05/1995 |
| Number: 51 | Version No./Date: 11/05/1986 |
| Number: 51 | Version No./Date: 09/12/1989 |
| Number: 51 | Version No./Date: 05/04/1994 |
| Number: 53 | Version No./Date: 09/12/1989 |
| Number: 61 | Version No./Date: 09/12/1989 |
| Number: 63 | Version No./Date: 01/08/1980 |
| Number: 63 | Version No./Date: 09/23/1982 |
| Number: 80 | Version No./Date: 01/08/1980 |

**Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

**Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

**Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected**

**Compliance Assurance Monitoring (CAM):**

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and

3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: DCOKEDRUM5 | |
| Control Device ID No.: DCOKEDRUM5 | Control Device Type: Cyclone |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: 111A-1 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| **Monitoring Information** | |
| Indicator: Inlet Gas Flow Rate | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a* | |
| Deviation Limit:<br>Minimum inlet gas flow rate (inlet air + steam flow) shall not be less than 33,600 lb/hr.<br>Maximum inlet gas flow rate (inlet air + steam flow) shall not exceed 151,500 lb/hr. | |
| Basis of CAM: A common way to control particulate emissions is by use of a cyclone. The option to monitor inlet gas flow rate is provided because monitoring inlet gas flow rate is used to indicate that the cyclone is removing particulate matter in accordance with its design specification. A minimum inlet gas flow rate can help ensure that the gas properly spirals under the influence of centrifugal force until it strikes the body of the cyclone. In addition, control device efficiency increases with increased inlet gas flow rate; however, if the flow rate exceeds a specific design value, turbulence becomes excessive and control efficiency decreases. Therefore, to maintain adequate control device efficiency a maximum inlet gas flow rate is also specified. | |

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-DISTILL | |
| Control Device ID No.: DB901B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: DB901C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: GRP-BOILER1 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: GRP-FURNACE1 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: GRP-FURNACE2 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: GRP-FURNACE4 | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: GT-1B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| **Applicable Regulatory Requirement** | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-1 |
| Pollutant: VOC/TOC | Main Standard: § 60.662(a) |
| **Monitoring Information** | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: All periods of operation not recorded. | |
| Basis of CAM: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 ºC and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-DISTILL | |
| Control Device ID No.: GRP-FLARE | Control Device Type: Flare |
| **Applicable Regulatory Requirement** | |
| Name: 40 CFR Part 60, Subpart NNN | SOP Index No.: 60NNN-3 |
| Pollutant: VOC/TOC | Main Standard: § 60.662(b) |
| **Monitoring Information** | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame. | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-VENT5 | |
| Control Device ID No.: P-1OLEF | Control Device Type: Flare |
| Control Device ID No.: P-2OLEF | Control Device Type: Flare |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: 115B-1 |
| Pollutant: VOC | Main Standard: § 115.122(a)(1) |
| **Monitoring Information** | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: Loss of pilot flame. | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-VENT6 | |
| Control Device ID No.: GRP-VENT6 | Control Device Type: Cyclone |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: 111A-1 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| **Monitoring Information** | |
| Indicator: Inlet Gas Flow Rate | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a* | |
| Deviation Limit:<br>Minimum inlet gas flow rate (steam flow) shall not be below 18,000 lb/hr.<br>Maximum inlet gas flow rate (steam flow) shall not exceed 102,400 lb/hr. | |
| Basis of CAM: A common way to control particulate emissions is by use of a cyclone. The option to monitor inlet gas flow rate is provided because monitoring inlet gas flow rate is used to indicate that the cyclone is removing particulate matter in accordance with its design specification. A minimum inlet gas flow rate can help ensure that the gas properly spirals under the influence of centrifugal force until it strikes the body of the cyclone. In addition, control device efficiency increases with increased inlet gas flow rate; however, if the flow rate exceeds a specific design value, turbulence becomes excessive and control efficiency decreases. Therefore, to maintain adequate control device efficiency a maximum inlet gas flow rate is also specified. | |

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

| Unit/Group/Process Information | |
|---|---|
| ID No.: OSDOCKFLR | |
| Control Device ID No.: P-TANKFARM | Control Device Type: Flare |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 115, Loading and Unloading of VOC | SOP Index No.: 115C-2 |
| Pollutant: VOC | Main Standard: § 115.212(a)(6)(A) |
| **Monitoring Information** | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: Loss of pilot flame. | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

**Periodic Monitoring:**

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: GRP-DEGREASER1 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 115, Degreasing Processes | SOP Index No.: 115E-1 |
| Pollutant: VOC | Main Standard: § 115.412(1) |
| **Monitoring Information** | |
| Indicator: Visual Inspection | |
| Minimum Frequency: Monthly | |
| Averaging Period: n/a | |
| Deviation Limit: Any monitoring data which indicates that the cold solvent cleaner is not in compliance with the applicable requirements of 30 TAC Chapter 115.412(1)(A)-(F) shall be considered and reported as a deviation. | |
| Basis of monitoring:<br>The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-TANK2 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 40 CFR Part 60, Subpart K | SOP Index No.: 60K-1 |
| Pollutant: VOC | Main Standard: § 60.112(a)(1) |
| **Monitoring Information** | |
| Indicator: External Floating Roof | |
| Minimum Frequency: annually | |
| Averaging Period: n/a | |
| Deviation Limit: The roof is not floating on the surface of the VOC/liquid has accumulated on the external floating roof/the seals are detached/holes or tears in the seal fabric | |
| Basis of monitoring:<br>The option to monitor VOC emissions by visually inspecting the external floating roof or the internal floating roof was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. If the external or internal floating roof is operating in accordance with its design it will meet its control efficiency. Visually inspecting the external floating roof or the internal floating roof is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; and 30 TAC Chapter 115. Measuring and recording the accumulated area of gaps if the tank is equipped with primary seals is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; 40 CFR 63 Subparts VV, DD, and MMM; and 30 TAC Chapter 115. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-TANK7 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: 115B-1 |
| Pollutant: VOC | Main Standard: § 115.112(e)(1) |
| **Monitoring Information** | |
| Indicator: Structural Integrity of the Pipe | |
| Minimum Frequency: Emptied and degassed | |
| Averaging Period: n/a | |
| Deviation Limit: It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel. | |
| Basis of monitoring:<br>The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-TANK7 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: 115B-1 |
| Pollutant: VOC | Main Standard: § 115.112(e)(1) |
| **Monitoring Information** | |
| Indicator: Record of Tank Construction Specifications | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to keep a record of tank construction specifications. | |
| Basis of monitoring:<br>The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRP-VENT1 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: 111A-1 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(C) |
| **Monitoring Information** | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per week | |
| Averaging Period: n/a | |
| Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 and opacity shall not exceed 15%. | |
| Basis of monitoring:<br>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures. | |

**Compliance Review**

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 06/23/2017.
   Site rating: 16.82 / Satisfactory Company rating: 5.36 / Satisfactory
   *(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)*
2. Has the permit changed on the basis of the compliance history or site/company rating?.....No

**Site/Permit Area Compliance Status Review**

1. Were there any out-of-compliance units listed on Form OP-ACPS?.....No
2. Is a compliance plan and schedule included in the permit? .....No

**Available Unit Attribute Forms**

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes

OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes